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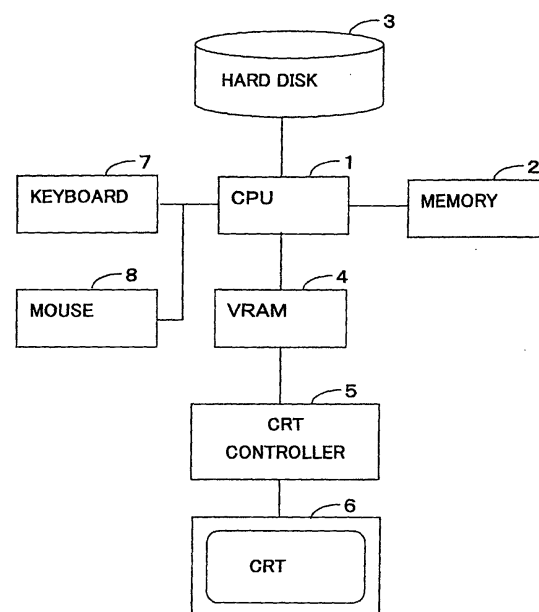
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(54) **Event-for-change oriented information display method and information processing system using the same method**

(57) A display technology is capable of facilitating a grasp of text information when scrolling the text information at a high speed and selecting a broad block of the text information. An information display method of the present invention comprises a step of displaying the text information by defining a display block thereof in the case of displaying the text information on a screen, a step of detecting a manipulation of moving the display block, a step of displaying the text information during a movement of the display block, and a step of changing a character size or a character pitch of the text information to be displayed. Another information display method of the present invention comprises a step of selecting a partial area of information from the text information, a step of calculating a size of the partial area of information selected from the text information, and a step of changing a character size or a character pitch of the text information to be displayed.

*FIG.1*





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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                       |                                                       |                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Citation of document with indication, where appropriate, of relevant passages                                                         | Relevant to claim                                     | CLASSIFICATION OF THE APPLICATION (Int.C1.7)         |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | US 5 659 333 A (OKISHIMA HARUHIRO)<br>19 August 1997 (1997-08-19)                                                                     | 1-3, 5, 9, 10, 12-14, 16, 20, 21, 23-25, 27, 31, 32   | G09G5/30<br>G09G5/34                                 |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | * column 2, line 64 - column 3, line 27;<br>figures 3A-3F *<br>* column 2, line 64 - column 3, line 27 *                              | 6-8, 17-19, 28-30                                     |                                                      |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | US 5 677 708 A (MATTHEWS III JOSEPH H ET AL)<br>14 October 1997 (1997-10-14)                                                          | 1, 4, 10, 12, 15, 21, 23, 26, 32                      |                                                      |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | * column 15, line 27 - column 15, line 67;<br>figures 5-8 *<br>US 5 923 861 A (BERTRAM RANDAL LEE ET AL)<br>13 July 1999 (1999-07-13) | 1, 2, 5-8, 10, 16-19, 21, 27-30, 32                   | TECHNICAL FIELDS SEARCHED (Int.C1.7)<br>G09G<br>G06F |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | * column 10, line 19 - column 11, line 51;<br>figures 8-12 *<br>US 5 930 809 A (MIDDLEBROOK R DAVID)<br>27 July 1999 (1999-07-27)     | 1, 2, 5-8, 10, 16-19, 21, 27-30, 32                   |                                                      |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | * column 3, line 8 - column 4, line 4 *<br>-/--                                                                                       | 11, 22, 33                                            |                                                      |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                       |                                                       |                                                      |
| Place of search<br>MUNICH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                       | Date of completion of the search<br>24 September 2003 | Examiner<br>Morris, D                                |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                       |                                                       |                                                      |

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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                           |                                                       |                                              |                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------|-----------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Citation of document with indication, where appropriate, of relevant passages                                                                                                                             | Relevant to claim                                     | CLASSIFICATION OF THE APPLICATION (Int.Cl.7) |                                         |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PATENT ABSTRACTS OF JAPAN<br>vol. 015, no. 099 (P-1177),<br>11 March 1991 (1991-03-11)<br>& JP 02 310592 A (NEC SOFTWARE LTD),<br>26 December 1990 (1990-12-26)<br><br>* abstract *                       | 1-5,9,<br>10,<br>12-16,<br>20,21,<br>23-27,<br>31,32  |                                              |                                         |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GB 2 333 215 A (SONY ELECTRONICS INC)<br>14 July 1999 (1999-07-14)<br><br>* page 7, line 5 - page 8, line 3; figure 2 *                                                                                   | 6-8,<br>17-19,<br>28-30                               |                                              |                                         |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PATENT ABSTRACTS OF JAPAN<br>vol. 1997, no. 12,<br>25 December 1997 (1997-12-25)<br>-& JP 09 212502 A (CASIO COMPUT CO LTD),<br>15 August 1997 (1997-08-15)<br>* abstract; figures 3,4 *                  | 11,22,33                                              |                                              |                                         |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | PATENT ABSTRACTS OF JAPAN<br>vol. 016, no. 421 (P-1414),<br>4 September 1992 (1992-09-04)<br>& JP 04 142594 A (PFU LTD),<br>15 May 1992 (1992-05-15)<br>* abstract *                                      | 11,22,33                                              |                                              | TECHNICAL FIELDS<br>SEARCHED (Int.Cl.7) |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EP 0 949 559 A (UNWIRED PLANET INC)<br>13 October 1999 (1999-10-13)<br>* paragraph '0024! - paragraph '0025!;<br>figures 4A,4B *<br>* paragraph '0027! - paragraph '0031!;<br>figures 5A-5L *<br><br>-/-- | 11,22,33                                              |                                              |                                         |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                           |                                                       |                                              |                                         |
| Place of search<br>MUNICH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                           | Date of completion of the search<br>24 September 2003 | Examiner<br>Morris, D                        |                                         |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                           |                                                       |                                              |                                         |

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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                         |                                                       |                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Citation of document with indication, where appropriate, of relevant passages                                                                                           | Relevant to claim                                     | CLASSIFICATION OF THE APPLICATION (Int.CI.7) |
| D, A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | PATENT ABSTRACTS OF JAPAN<br>vol. 1996, no. 12,<br>26 December 1996 (1996-12-26)<br>& JP 08 212038 A (PFU LTD),<br>20 August 1996 (1996-08-20)<br>* abstract *<br>----- | 1-33                                                  |                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                         |                                                       | TECHNICAL FIELDS SEARCHED (Int.CI.7)         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                         |                                                       |                                              |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                         |                                                       |                                              |
| Place of search<br>MUNICH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                         | Date of completion of the search<br>24 September 2003 | Examiner<br>Morris, D                        |
| CATEGORY OF CITED DOCUMENTS<br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |                                                                                                                                                                         |                                                       |                                              |

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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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**LACK OF UNITY OF INVENTION**  
**SHEET B**

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-5,9,10,12-16,20,21,23-27,31,32

An information display method (- claims 1-3, 5 'first two alternatives! and 10), an information processing system (- claims 12-14, 16 'first two alternatives! and 21), and a storage medium readable by machine (- claims 23-25, 27 'first two alternatives! and 32) in which, in accordance with the detection of a changing manipulation, i.e. a scrolling of a screen, an attribute in the display information, i.e. character size, is changed, and in which the change is based upon the speed or direction at which the display block is changed.

2. Claims: Dependent claims 5,7,8,16,18,19,27,29,30

An information display method (- claims 5 'last two alternatives!, 7 and 8), an information processing system (- claims 16 'last two alternatives!, 18 and 19), and a storage medium readable by machine (- claims 27 'last two alternatives!, 29 and 30) in which, in accordance with the detection of a changing manipulation, i.e. a scrolling of a screen, the screen is divided into different parts and wherein information is displayed with respective different attributes in the different parts.

3. Claims: Dependent claims 6, 17, 28

An information display method (- claim 6), an information processing system (- claim 17), and a storage medium readable by machine (- claim 28) in which, in accordance with the detection of a changing manipulation, i.e. a scrolling of a screen, different attributes are set corresponding to a position in the display area.

4. Claims: Independent claims 11, 22 and 33

An information display method (- claim 11), an information processing system (- claim 22), and a storage medium readable by machine (- claim 33) in which, in which, if the size of a selected part of information exceeds a size with which information can be displayed within a predetermined display area, the selected part of information is displayed by changing one of either:  
Alternative 1) the attribute of the part of information; or  
Alternative 2) the information itself, i.e. editing of the information, in an area that contains this selected part of information.

Further, no mention is made in the respective wordings of any of independent claims 11, 22 and 33 of the change in attribute being dependent on the detection of (- cf. e.g.



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**LACK OF UNITY OF INVENTION**  
**SHEET B**

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

the last two steps of independent claim 1) "a manipulating of changing a display block of information displayed in the display area".

Document US 5659333 (- hereinafter D1) discloses an information display method comprising steps of:  
displaying information in a predetermined display area (- Figs. 3A-3C);  
detecting a manipulation of changing a display block of the information displayed in the display area (- "Scroll Event", step 1004 - Fig. 2);  
and  
displaying the information by changing an attribute in accordance with the detection of the changing manipulation (- "Size is Reduced", step 1016 - Fig. 2, Figs. 3D-3F and "data displayed on the screen is reduced" - col. 3, lines 4-6).

Subsequently, D1 is considered to disclose all of the features of independent claim 1 (- Article 54(1)(2) EPC). Furthermore, the different inventions claimed in respect of the above groups of claims are considered to lack a technical relationship which finds expression in the claims in terms of the same or corresponding technical features (- Rule 30(1) EPC; Article 82 EPC; Guidelines C-III, 7.2).

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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24-09-2003

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82